

BRFSS Brief

Number 1807

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

High Cholesterol

New York State Adults, 2015

Introduction and Key Findings

Nearly 1 in 3 Americans has high blood cholesterol, a condition where the blood contains too many lipids.¹ Elevated blood cholesterol levels are a major modifiable risk factor for cardiovascular disease (CVD), including heart attack and stroke. Lowering elevated blood cholesterol through proven lifestyle changes and/or cholesterol-lowering medications can reduce the risk for CVD. Lifestyle modification activities which include adhering to a heart healthy diet, getting regular exercise, avoiding all tobacco products, and maintaining a healthy weight are critical to health promotion and cardiovascular risk reduction.²

Blood cholesterol goals are now based on an individual's risk factors for CVD. In addition to high cholesterol, other modifiable risk factors for CVD include uncontrolled hypertension, diabetes, physical inactivity, smoking, being overweight or obese, and drinking more alcohol than the recommended daily amount for gender. Non-modifiable risk factors include race and ethnicity, family history of high cholesterol and early onset of CVD, and increased age. Working with a health care provider to identify risk factors, getting cholesterol levels checked and developing a personalized plan to lower risk are key steps to preventing CVD.^{2,3}

Key Findings

Among adults in New York State (NYS) who have had their cholesterol checked, over one-third report being told they had high cholesterol levels (36.6%). High cholesterol is significantly more prevalent among adults who are obese (46.0%) or overweight (40.0%) than those who are neither overweight nor obese (27.1%). Adults with diabetes have a significantly higher rate (65.7%) of elevated cholesterol compared to adults without diabetes (32.8%).

Eighty percent of NYS adults reported that they had had their cholesterol checked within the past five years. Rates for having cholesterol checked within the past five years were significantly higher for whites and African Americans (82.7% and 83.1%, respectively), adults with annual household income \$50,000 and greater (86.0%), adults with Medicare (90.5%), and adults living with diabetes (93.8%).

BRFSS questions

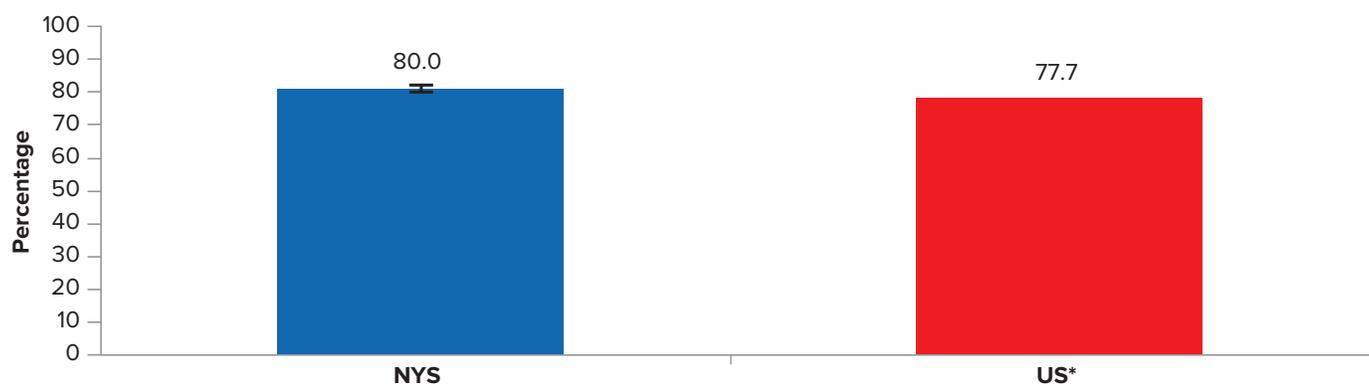
1. Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked?

[If "yes"]

2. About how long has it been since you last had your blood cholesterol checked?

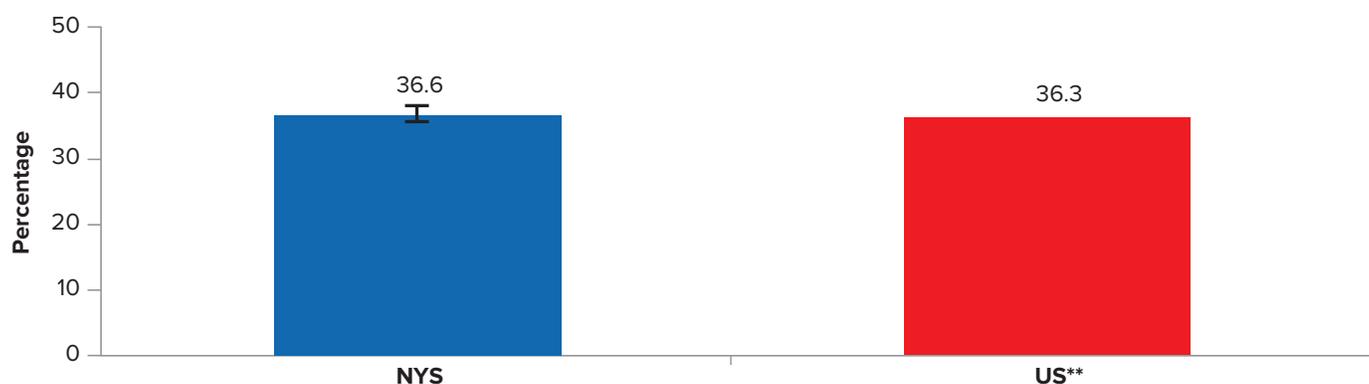
3. Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

Figure 1. Cholesterol checked within the past 5 years among U.S. and New York State adults, BRFSS 2015



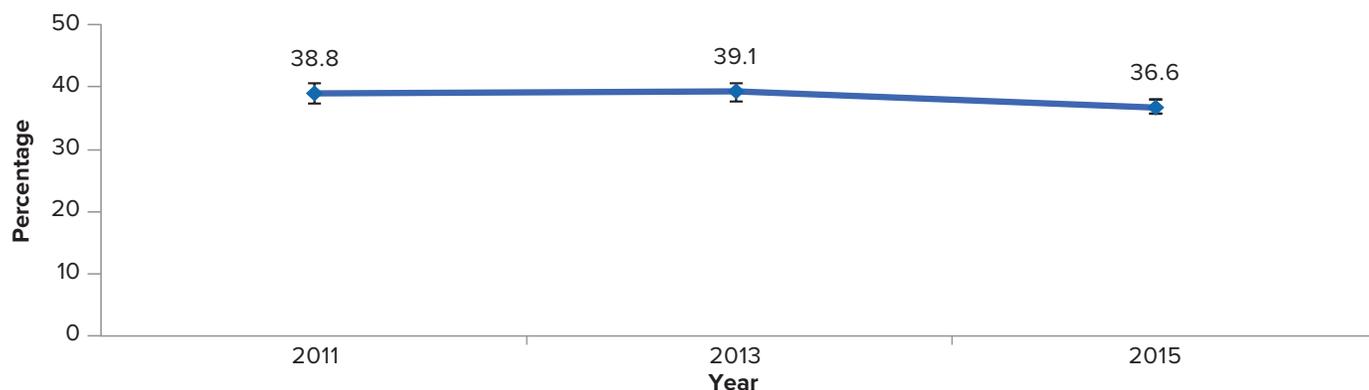
*Median percent; includes data from all 50 states and the District of Columbia.
 Note: Error bars represent 95% confidence intervals.

Figure 2. High cholesterol* among U.S. and New York State adults, BRFSS 2015



*Those who ever had blood cholesterol checked.
 **Median percent; includes data from all 50 states and the District of Columbia.
 Note: Error bars represent 95% confidence intervals.

Figure 3. High cholesterol* among New York State adults, by BRFSS survey year



*Those who ever had blood cholesterol checked.
 Note: Error bars represent 95% confidence intervals.

Blood cholesterol among New York State adults, 2015 BRFSS

| | Blood cholesterol | | | |
|---|-------------------------------|---------------------|-----------------------------|-----------|
| | High cholesterol ^a | | Checked within past 5 years | |
| | % ^b | 95% CI ^b | % | 95% CI |
| Total New York State (NYS) n=12357 | 36.6 | 35.4-37.8 | 80.0 | 78.9-81.0 |
| Sex | | | | |
| Male | 38.3 | 36.4-40.1 | 77.2 | 75.5-78.9 |
| Female | 35.1 | 33.5-36.7 | 82.5 | 81.1-83.9 |
| Age (years) | | | | |
| 18-24 | 12.2 | 8.1-16.4 | 48.5 | 43.9-53.2 |
| 25-34 | 15.5 | 12.6-18.4 | 63.2 | 59.8-66.5 |
| 35-44 | 26.0 | 22.9-29.2 | 81.8 | 79.4-84.3 |
| 45-54 | 38.6 | 35.9-41.4 | 87.6 | 85.8-89.4 |
| 55-64 | 49.3 | 46.7-52.0 | 91.0 | 89.3-92.7 |
| 65+ | 53.1 | 51.0-55.2 | 95.5 | 94.6-96.4 |
| Race/ethnicity | | | | |
| White non-Hispanic | 39.0 | 37.6-40.5 | 82.7 | 81.5-84.0 |
| Black non-Hispanic | 33.1 | 29.6-36.6 | 83.1 | 80.2-85.9 |
| Hispanic | 32.2 | 28.9-35.5 | 72.0 | 69.0-75.0 |
| Other non-Hispanic | 35.4 | 30.0-40.7 | 76.4 | 72.4-80.5 |
| Annual household income | | | | |
| <\$25,000 | 40.5 | 37.8-43.3 | 74.6 | 72.2-76.9 |
| \$25,000-\$49,999 | 35.8 | 32.9-38.7 | 77.8 | 75.2-80.4 |
| \$50,000 and greater | 35.2 | 33.5-37.0 | 86.0 | 84.5-87.4 |
| Missing ^c | 36.0 | 32.7-39.4 | 74.8 | 71.7-78.0 |
| Educational attainment | | | | |
| Less than high school (HS) | 46.4 | 42.1-50.7 | 70.2 | 66.6-73.8 |
| High school or GED | 39.6 | 37.1-42.2 | 77.0 | 74.7-79.3 |
| Some college | 34.1 | 31.8-36.5 | 82.3 | 80.3-84.3 |
| College graduate | 32.6 | 31.0-34.2 | 85.6 | 84.2-87.0 |
| Disability^d | | | | |
| Yes | 52.4 | 49.6-55.2 | 82.3 | 80.0-84.6 |
| No | 32.7 | 31.3-34.1 | 79.3 | 78.1-80.6 |
| Have health care coverage | | | | |
| Private | 35.0 | 33.2-36.8 | 86.1 | 84.7-87.5 |
| Medicare | 52.2 | 49.5-54.9 | 90.5 | 88.6-92.3 |
| Medicaid | 34.8 | 30.2-39.4 | 75.0 | 71.0-78.9 |
| Other insurances ^e | 38.6 | 31.6-45.6 | 76.8 | 69.8-83.8 |
| No coverage | 29.6 | 24.5-34.6 | 52.4 | 47.9-56.8 |
| Weight status | | | | |
| Neither overweight nor obese | 27.1 | 25.2-29.1 | 73.7 | 71.7-75.7 |
| Overweight | 40.0 | 37.8-42.1 | 84.3 | 82.6-86.0 |
| Obese | 46.0 | 43.4-48.6 | 85.1 | 83.2-87.1 |
| Diabetes | | | | |
| Yes | 65.7 | 62.5-69.0 | 93.8 | 91.6-95.9 |
| No | 32.8 | 31.5-34.1 | 78.4 | 77.3-79.6 |
| Region | | | | |
| New York City (NYC) | 36.6 | 34.5-38.7 | 80.2 | 78.5-81.9 |
| NYS exclusive of NYC | 36.6 | 35.1-38.0 | 79.8 | 78.4-81.1 |

^a If ever had blood cholesterol checked, and ever told by a doctor, nurse or other health professional that blood cholesterol was high.

^b % = weighted percentage; CI = confidence interval.

^c "Missing" category included because more than 10% of the sample did not report income.

^d All respondents who reported at least one type of disability (cognitive, self-care, independent living, vision, or mobility).

^e Includes TRICARE, VA/Military, and Indian Health Services.

References

1. Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R, et al. Heart disease and stroke statistics—2017 update: a report from the American Heart Association. *Circulation*. 2017; 135:e1–e458.
2. Centers for Disease Control and Prevention. Cholesterol: Preventing and Managing High Cholesterol. Updated January 23, 2018. Available at: <https://www.cdc.gov/cholesterol/index.htm>
3. Stone NS, et al. 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2014; 129:S1-S45.

Program Contributions

New York State Department of Health
Bureau of Chronic Disease Evaluation and Research
Bureau of Community Chronic Disease Prevention

Order Information

Copies may be obtained by contacting:

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